

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1 1-47. (Cancelled).

1 48. (Currently amended) A method implemented by a secondary server to maintain a
2 secondary directory, comprising:
3 receiving notification from a primary server that a particular ~~update~~ non-idempotent
4 operation has been ~~made performed~~ by the primary server ~~to on~~ a primary
5 directory;
6 in response to the notification, ~~making~~ performing the particular ~~update~~ non-
7 idempotent operation ~~to on~~ the secondary directory such that the ~~second~~
8 secondary directory mirrors the primary directory;
9 receiving a request, from a client, to ~~make~~ perform the particular ~~update~~ non-
10 idempotent operation ~~to on~~ the secondary directory, wherein the client sends
11 the request because the client has not received confirmation that the primary
12 server has ~~made performed~~ the particular ~~update~~ non-idempotent operation ~~to~~
13 on the primary directory;
14 ~~determining~~ recognizing that the particular ~~update~~ non-idempotent operation,
15 identified in the request, cannot be ~~made performed~~ ~~to on~~ the secondary
16 directory because the particular ~~update~~ non-idempotent operation has already
17 been ~~made performed~~ ~~to on~~ the secondary directory as a result of receiving
18 the notification from the primary server; and

19 in response to the ~~determination~~ recognition that the particular ~~update non-~~
20 idempotent operation has already been ~~made~~ performed ~~to~~ on the secondary
21 directory, the secondary server sending an indication to the client that the
22 particular ~~update non-idempotent operation~~ was successfully ~~made to~~
23 performed on the secondary directory even though the non-idempotent
24 operation was not performed on the secondary directory after receiving the
25 request.

1 49. (Currently amended) The method of Claim 48, wherein said particular ~~update non-~~
2 idempotent operation ~~involves~~ is an add operation.

1 50. (Currently amended) The method of Claim 48, wherein said particular ~~update non-~~
2 idempotent operation ~~involves~~ is a delete operation.

1 51. (Currently amended) The method of Claim 48, wherein said particular ~~update non-~~
2 idempotent operation ~~involves~~ is adding a rename operation.

1 52. (Currently amended) A machine-readable medium carrying one or more sequences
2 of instructions for maintaining a secondary directory, wherein execution of the one
3 or more sequences of instructions by one or more processors of a secondary server
4 causes the one or more processors to perform the steps of:
5 receiving notification from a primary server that a particular ~~update non-idempotent~~
6 operation has been ~~made~~ performed by the primary server ~~to~~ on a primary
7 directory;
8 in response to the notification, ~~making~~ performing the particular ~~update non-~~
9 idempotent operation ~~to~~ on the secondary directory such that the ~~second~~
10 secondary directory mirrors the primary directory;

11 receiving a request, from a client, to ~~make~~ perform the particular ~~update~~ non-
12 idempotent operation ~~to~~ on the secondary directory, wherein the client sends
13 the request because the client has not received confirmation that the primary
14 server has ~~made~~ performed the particular ~~update~~ non-idempotent operation ~~to~~
15 on the primary directory;
16 ~~determining~~ recognizing that the particular ~~update~~ non-idempotent operation,
17 identified in the request, cannot be ~~made~~ performed ~~to~~ on the secondary
18 directory because the particular ~~update~~ non-idempotent operation has already
19 been ~~made~~ performed ~~to~~ on the secondary directory as a result of receiving
20 the notification from the primary server; and
21 in response to the ~~determination~~ recognition that the particular ~~update~~ non-
22 idempotent operation has already been ~~made~~ performed ~~to~~ on the secondary
23 directory, the secondary server sending an indication to the client that the
24 particular ~~update~~ non-idempotent operation was successfully ~~made~~ performed
25 ~~to~~ on the secondary directory even though the non-idempotent operation was
26 not performed on the secondary directory after receiving the request.

1 53. (Currently amended) The machine-readable medium of Claim 52, wherein said
2 particular ~~update~~ non-idempotent operation ~~involves~~ is an add operation.

1 54. (Currently amended) The machine-readable medium of Claim 52, wherein said
2 particular ~~update~~ non-idempotent operation ~~involves~~ is a delete operation.

1 55. (Currently amended) The machine-readable medium of Claim 52, wherein said
2 particular ~~update~~ non-idempotent operation ~~involves~~ is adding a rename operation.

1 56. (Currently amended) An apparatus for maintaining a secondary directory,
2 comprising:
3 a ~~module~~ means for receiving notification from a primary server that a particular
4 ~~update non-idempotent operation~~ has been ~~made~~ performed by the primary
5 server ~~to~~ on a primary directory;
6 a ~~module~~ means for ~~making performing~~ the particular ~~update non-idempotent~~
7 ~~operation~~ to on a secondary directory such that the ~~second~~ secondary
8 directory mirrors the primary directory in response to receiving the
9 notification;
10 a ~~module~~ means for receiving a request, from a client, to ~~make~~ perform the particular
11 ~~update non-idempotent operation~~ to on the secondary directory, wherein the
12 client sends the request because the client has not received confirmation that
13 the primary server has ~~made performed~~ the particular ~~update non-idempotent~~
14 ~~operation~~ to on the primary directory;
15 a ~~module~~ means for ~~determining~~ recognizing that the particular ~~update non-~~
16 ~~idempotent operation, identified in the request, cannot be made performed to~~
17 on the secondary directory because the particular ~~update non-idempotent~~
18 ~~operation~~ has already been ~~made performed to~~ on the secondary directory as
19 a result of receiving the notification from the primary server; and
20 a ~~module~~ means for sending, from the secondary server, an indication to the client
21 that the particular ~~update non-idempotent operation~~ was successfully ~~made~~
22 ~~performed to~~ on the secondary directory in response to ~~determining the~~
23 recognition that the particular ~~update non-idempotent operation~~ has already
24 been ~~made performed to~~ on the secondary directory even though the non-

25 idempotent operation was not performed on the secondary directory after
26 receiving the request.

1 57. (Currently amended) The apparatus of Claim 56, wherein said particular ~~update~~ non-
2 idempotent operation ~~involves~~ is an add operation.

1 58. (Currently amended) The apparatus of Claim 56, wherein said particular ~~update~~ non-
2 idempotent operation ~~involves~~ is a delete operation.

1 59. (Currently amended) The apparatus of Claim 56, wherein said particular ~~update~~ non-
2 idempotent operation ~~involves~~ is adding a rename operation.

1 60. (New) The method of Claim 48, wherein said primary directory and said secondary
2 directory are both LDAP directories.

1 61. (New) The machine-readable medium of Claim 52, wherein said primary directory
2 and said secondary directory are both LDAP directories.

1 62. (New) The apparatus of Claim 56, wherein said primary directory and said
2 secondary directory are both LDAP directories.